IN THE CLAIMS:

1. (original) A distributed call progress tone detection system couplable to a packet network, comprising:

a switching partition couplable to said packet network and including:

line interface modules configured to provide an interface to corresponding access nodes,

a call progress tone detector configured to perform call progress tone detection analysis and generate an indication thereof, and

an input-output distributor configured to employ a circuit to interconnect said call progress tone detector and a first of said line interface modules to allow said call progress tone detector to perform said call progress tone detection analysis with respect to said first of said line interface modules; and

a main control unit configured to receive requests from an application over said packet network, transmit call and control processing commands to said switching partition, create an interconnection between said first of said line interface modules and a second of said line interface modules based on said indication and notify said application of said interconnection.

2. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said call progress tone detector includes energy detection.

3. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said call progress tone detector includes energy detection with guard band elimination.

4. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said call progress tone detector is further configured to receive at least one tunable

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parameter and adjust said call progress tone detection analysis on a call-by-call basis thereof.

5. (original) The distributed call progress tone detection system as recited in Claim 4 wherein said at least one tunable parameter is selected from the group consisting of:

a software answer detect time,

a hardware answer detect time,

a ring no answer time,

a minimum call answer time,

a recorded human speech detect time,

a maximum resource wait time, and

a pause wait time after speech detected.

6. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said indication is selected from the group consisting of:

a busy tone,

a reorder tone,

a ring back tone with no answer,

a human speech with answer quickly,

a human speech with pause detected after speech,

a recorded human speech,

a facsimile/modem,

a Telco Intercept, and

a no energy detected before answer detect time expired.

7. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said line interface modules are dynamically configurable via program downloads.

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8. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said call progress tone detector may be embodied within at least one of said line interface modules.

9. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said call progress tone detector may be embodied within software downloaded to at least one of said line interface modules.

10. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said main control unit further notifies said application of said indication.

11. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said call and control processing commands are selected from the group consisting of:

a no answer supervision command,

a use network answer supervision command,

a best try full analysis command, and

a full call progress analysis command.

12. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said main control unit is further configured to auto-terminate a call on said first of said line interface modules if an access node coupled to said second of said line interface modules is unavailable.

13. (original) The distributed call progress tone detection system as recited in Claim 12 wherein a timeout period, associated with an availability of said access node, elapses before said main control unit auto-terminates said call.

14. (original) The distributed call progress tone detection system as recited in Claim 1 further comprising said application and wherein said application is selected from the group

consisting of:

a non-predictive dialer,

a predictive dialer,

an answering machine dialer, and

a call center.

15. (original) The distributed call progress tone detection system as recited in Claim 14 wherein, upon receiving said notification from said main control unit, said application is configured to transmit information associated with said request to a terminal coupled to a third of said line interface modules that is associated with said second of said line interface modules.

16. (original) The distributed call progress tone detection system as recited in Claim 1 wherein said circuit is a circuit-switched matrix configured to control and selectively interconnect said line interface modules and said call progress tone detector.

Claims 17-32 (canceled)

33. (original) A distributed call progress tone detection system couplable to a packet network, comprising:

a switching partition means couplable to said packet network and including:

line interface means that provides an interface to corresponding access nodes,

a call progress tone detection means that performs call progress tone detection analysis and generates an indication thereof, and

an input-output distributor means that employs a circuit means to interconnect said call progress tone detection means and a first of said line interface means to allow said call

progress tone detection means to perform said call progress tone detection analysis with respect to said first of said line interface means; and

a main control unit means that receives requests from an application means over said packet network, transmits call and control processing commands to said switching partition means, creates an interconnection between said first of said line interface means and a second of said line interface means based on said indication and notify said application means of said interconnection.

34. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said call progress tone detection means includes energy detection.

35. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said call progress tone detection means includes energy detection with guard band elimination.

36. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said call progress tone detection means further receives at least one tunable parameter and adjusts said call progress tone detection analysis on a call-by-call basis thereof.

37. (original) The distributed call progress tone detection system as recited in Claim 36 wherein said at least one tunable parameter is selected from the group consisting of:

a software answer detect time,

a hardware answer detect time,

a ring no answer time,

a minimum call answer time,

a recorded human speech detect time,

a maximum resource wait time, and

a pause wait time after speech detected.

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38. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said indication is selected from the group consisting of:

a busy tone,

a reorder tone,

a ring back tone with no answer,

a human speech with answer quickly,

a human speech with pause detected after speech,

a recorded human speech,

a facsimile/modem,

a Telco Intercept, and

a no energy detected before answer detect time expired.

39. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said line interface means are dynamically configurable via program downloads.

40. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said call progress tone detection means is embodied within at least one of said line interface means.

41. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said call progress tone detection means is embodied within software downloaded to at least one of said line interface means.

42. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said main control unit means further notifies said application means of said indication.

43. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said call and control processing commands are selected from the group consisting of:

a no answer supervision command,

a use network answer supervision command,

a best try full analysis command, and

a full call progress analysis command.

44. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said main control unit means also auto-terminates a call on said first of said line interface means if an access node coupled to said second of said line interface means is unavailable.

45. (original) The distributed call progress tone detection system as recited in Claim 44 wherein a timeout period, associated with an availability of said access node, elapses before said main control unit means auto-terminates said call.

46. (original) The distributed call progress tone detection system as recited in Claim 33 further comprising said application means and wherein said application means is selected from the group consisting of:

a non-predictive dialer,

a predictive dialer,

an answering machine dialer, and

a call center.

47. (original) The distributed call progress tone detection system as recited in Claim 46 wherein, upon receiving said notification from said main control unit means, said application means transmits information associated with said request to a terminal coupled to a third of said line interface means that is associated with said second of said line interface means.

48. (original) The distributed call progress tone detection system as recited in Claim 33 wherein said circuit means is a circuit-switched matrix means that controls and selectively

interconnects said line interface means and said call progress tone detection means.

49. (original) An enterprise call center with call progress tone detection coupled to a packet network, comprising:

switching partitions coupled to said packet network and including:

line interface modules that provide an interface to corresponding access nodes,

a call progress tone detector that performs call progress tone detection analysis and generates an indication thereof, and

an input-output distributor that employs a circuit to interconnect said call progress tone detector and a first of said line interface modules to allow said call progress tone detector to perform said call progress tone detection analysis with respect to said first of said line interface modules;

a primary main control unit associated with a first location and coupled to said packet network; and

a secondary main control unit associated with a second location and coupled to said packet network, at least one of said primary and secondary main control units receiving requests from an application over said packet network, transmitting call and control processing commands to at least one of said switching partitions, creating an interconnection between said first of said line interface modules and an agent coupled to one of said line interface modules in one of said switching partitions based on said indication and notifing said application of said interconnection.

50. (original) The enterprise call center as recited in Claim 49 wherein said call progress tone detector includes energy detection.

51. (original) The enterprise call center as recited in Claim 49 wherein said call progress tone detector includes energy detection with guard band elimination.

52. (original) The enterprise call center as recited in Claim 49 wherein said call progress tone detector further receives at least one tunable parameter and adjusts said call progress tone detection analysis on a call-by-call basis thereof.

53. (original) The enterprise call center as recited in Claim 52 wherein said at least one tunable parameter is selected from the group consisting of:

a software answer detect time,

a hardware answer detect time,

a ring no answer time,

a minimum call answer time,

a recorded human speech detect time,

a maximum resource wait time, and

a pause wait time after speech detected.

54. (original) The enterprise call center as recited in Claim 49 wherein said indication is selected from the group consisting of:

a busy tone,

a reorder tone,

a ring back tone with no answer,

a human speech with answer quickly,

a human speech with pause detected after speech,

a recorded human speech,

a facsimile/modem,

a Telco Intercept, and

a no energy detected before answer detect time expired.

55. (original) The enterprise call center as recited in Claim 49 wherein said line interface modules are dynamically configurable via program downloads.

56. (original) The enterprise call center as recited in Claim 49 wherein said call progress tone detector may be embodied within at least one of said line interface modules.

57. (original) The enterprise call center as recited in Claim 49 wherein said call progress tone detector may be embodied within software downloaded to at least one of said line interface modules.

58. (original) The enterprise call center as recited in Claim 49 wherein said at least one of said primary and secondary main control units further notifies said application of said indication.

59. (original) The enterprise call center as recited in Claim 49 wherein said call and control processing commands are selected from the group consisting of:

a no answer supervision command,

a use network answer supervision command,

a best try full analysis command, and

a full call progress analysis command.

60. (original) The enterprise call center as recited in Claim 49 wherein said at least one of said primary and secondary main control units further auto-terminates a call on said first of said line interface modules if all of said line interface modules, in each of said switching partitions, associated with agents are unavailable.

61. (original) The enterprise call center as recited in Claim 60 wherein a timeout period, associated with an availability of said agents, elapses before said at least one of said primary and secondary main control units auto-terminates said call.

62. (original) The enterprise call center as recited in Claim 49 further comprising said

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application and wherein said application is selected from the group consisting of:

a non-predictive dialer,

a predictive dialer,

an answering machine dialer, and

a call center.

63. (original) The enterprise call center as recited in Claim 62 wherein, upon receiving said notification from said main control unit, said application transmits information associated with said request to a terminal coupled to another of said line interface modules in said one of said switching partitions that is associated with said agent coupled to said one of said line interface modules in said one of said switching partitions.

64. (original) The enterprise call center as recited in Claim 49 wherein said circuit is a circuit-switched matrix that controls and selectively interconnects said line interface modules and said call progress tone detector.